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Ecological Description of Nematofauna of Annual Weeds

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Abstract: Ecological description of nematoda fauna of annual wild grasses information is provided. Saprobiotic nematodes and A.A. Ecologically divided groups were mentioned by Paramanov

Key words: ecological classification of phytohelminths, eusaprobionts, pararhizobionts and devisaprobionts

The main principle of any ecological investigation is to study the relationship between the organism and the environment. When studying this, attention is definitely paid to the biological complex of life forms. This biocenological complex is adapted to this biocenosis and biotope, biological and abiotic factors affecting it. Therefore, according to A.A. Paramanov (1962), when studying phytonematodes, in order to determine ecological groups, it is necessary to pay attention to their relationship with plants [2]. This principle helps to develop control measures against phytonematodes. It also facilitates the study of the relationship between nematodes and plants. It allows to study modern groups of phytonematodes. The saprobiotic nematodes that appeared at the beginning did not have high biochemical activity, because their enzymatic glands were not well developed. Nematodes are connected with fungi and bacteria through trophic dependence (Hirschmann, 1952). Nematodes use the chemical activity of bacteria to hydrolyze carbohydrates, break down proteins, and use these substances as food. This process was two-way, that is, nematodes began to accept bacteria and fungi as food along with decay products[1]. On the other hand, they can adapt to feeding on predatory fungi and nematodes. It is also determined that substances secreted by nematodes accelerate the reproduction of bacteria and fungi. Thus, relations of mutual support began to be established between this group of organisms. The development of such connections led to the decay of living plant organs and their use by phytobionts.

However, dependence of nematodes on saprobiotic organisms is maintained until the ability of nematodes to enter healthy plant tissue and change it appears. Thus, individual biochemical activity of nematodes appeared. In such nematodes, powerful digestive enzymes began to be produced. In this way, the trophic relationship with bacteria and fungi was broken. Nematodes penetrate the plant tissue by dissolving it. In this way, phytonematodes appeared. However, many nematodes continue to live in the rhizosphere in association with bacteria and fungi. Based on this, A.A. Paramanov recommended dividing into the following ecological groups.

1. Soil nematodes around the roots - Pararhizobionts (the basis of origin of phytobionts).
2. Typical dissolving nematodes are eusaprobionts (the shortest path to phytobionts).
3. Abberant or non-typical saprobionts - devisaprobionts (atypical path of phytobionts).
4. Phytohelminths or phytoparasitic nematodes (progressive direction covering sporophyte and gametophyte plants).

Para-rhizobionts. This term was used by Paramonov (1945) to distinguish free soil nematodes from plant root nematodes. dependent soil nematodes. Paramanov first included representatives of the Dorylaiminae subfamily [3].

The term eusaprobionts was introduced by Paramonov (1952-1959) because the saprobiotic environment is different. The processes taking place in the environment are characterized by organic material undergoing saprobiotic decomposition. There are different saprobiotic forms at different stages of organic matter decomposition. Thus, "eusarobionts" have a differentiated meaning. From the trophic (nutritional) point of view, eusaprobionts are related to bacteria in the saprobiotic environment. According to France (1942), eusaprobionts are sugars that are the products of protein decomposition produced as a result of the life activity of the saprobiotic microflora. fed with Müge (1958) put forward the correct opinion that mainly the decomposition products of plant tissues play an important role in the nutrition of eusaprobionts. Orley (Oerley, 1886) and Reiter (Reiter, 1928), Falk (Volk, 1950) and Girishman (Hirschmann, 1981) observed that species of eusaprobionts alternate one after the other in a saprobiotic environment. Reiter observed that species of the genus Rhabditis rapidly alternate in culture: he found out that Rh. Thousands of individuals of Inermis, Rh. There are up to 100 individuals of

longispira, after 2 days Rh. longispira disappears. Cylindrica, terricola, inermis, and it increases a lot. Rh. elongata decreases greatly, after 3 days inermis decreases even more, and yelongate, on the contrary, increases greatly, and after a week only elongate remains in the culture.

Devisaprobionts differ from typical eusaprobionts in that they use the saprobiotic environment as a necessary source of nutrients for their survival, and they can enter healthy plant tissues. Panagralaimus rigidus occurs more in saprobiotic environment. Goffart (1933) propagated this species in meat broth. At the same time, this species is found in various healthy plant tissues. It can enter roots, stems and leaves and multiply there. Phytonematodes mean phytoparasitic nematodes. They differ sharply from animal nematodes. The size of the body of nematodes parasitizing animals, hypermorphism (highly developed) of the reproductive system of the female reproductive system, the development of the eggs with small and large numbers often results in the change of host (biohelminth) or the release of the larva into the external environment. (geohelminth) is characterized by. Phytoparasitic nematodes do not obey these general rules for zooparasites.

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